

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A method of generating tethered extracellular or intracellular domains of transmembrane proteins comprising:

(a) preparing an expression vector comprising a 5' signal sequence, a purification epitope tag, a sequence coding for the extracellular domain of a membrane protein, and a 3' anchor sequence; and

transfecting mammalian cells with said expression vector to generate an anchor tethered protein targeted to the extracellular domain of a plasma membrane; or

(b) preparing an expression vector comprising a 5' myristoylation encoding sequence, a sequence coding for the intracellular domain of a membrane protein, and a 3' purification epitope tag; and

transfecting mammalian cells with said expression vector to generate a myristoylated tethered protein targeted to the intracellular domain of a membrane.

2. (Original) The method according to claim 1, wherein said 3' anchor sequence is a GPI anchor sequence.

3. (Original) The method according to claim 2, wherein said GPI-anchor sequence comprises the 32 terminal amino acids of the GPI-anchoring sequence.

4. (Currently amended) The method according to ~~any previous claim 1~~, wherein said mammalian cells are selected from the group consisting of CHO or HEK-293 cells.

5. (Currently amended) The method according to ~~any previous claim 1~~, wherein said signal sequence is selected from a protein selected from the group consisting of epidermal growth factor, insulin, nerve growth factor, platelet-derived growth factor, glucagon, ICAM-1, B7-1, TrkA, platelet-derived growth factor receptor, and CD58.

6. (Currently amended) The method according to ~~any previous claim 1~~, wherein said purification epitope tag is a hexa-histidine epitope tag.

7. (Currently amended) The method according to ~~any previous claim 1~~, wherein said myristoylation-encoding sequence is a c-Src myristoylation-encoding sequence.

8. (Original) An expression vector for generating a tethered extracellular domain protein comprising:

- a 5' signal sequence,
- a purification epitope tag;
- a sequence coding for the extracellular domain of a membrane protein; and
- a 3' anchor sequence.

9. (Original) The vector according to claim 8, wherein said anchor sequence is a GPI sequence.

10. (Currently amended) The vector according to claim 8 ~~or 9~~, wherein said purification epitope tag is a hexa-histidine epitope tag.

11. (Original) An expression vector for generating a tethered intracellular domain protein comprising:

- a 5' signal sequence for myristoylation;
- a sequence coding for the intracellular domain of a membrane protein; and
- a 3' purification epitope tag.

12. (Original) The vector according to claim 11, wherein said purification epitope tag is a hexa-histidine epitope tag.